

Olympic Park

Black Redstart Survey Report

October 2008

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Executive Summary

Atkins undertook black redstart surveys during the breeding seasons of 2007 and 2008 to ensure that any breeding pairs were discovered and suitably protected.

No black redstarts were recorded on the Olympic Park throughout the whole survey period.

All other birds seen using the site during the black redstart surveys were also recorded, with a total of 55 species being noted. Some of these are declining Birds of Conservation Concern and some are Biodiversity Action Plan priority species, for which action plans have been written.

Mitigation strategies for the Olympic Park should address the requirements of these species in relation to the design of new habitats, the provision of nesting sites and feeding areas. A selection of mitigation measures have been suggested in this document for some of the key species recorded on the site.

1. Introduction

- 1.1 Black redstarts (*Phoenicurus ochruros*) are small, robin-sized thrushes and are on the Amber List of Birds of Conservation Concern due to their UK population levels being at a mean level of 1-3000 pairs over the past 5 years. Black redstarts are amongst the 12 species (of which 5 are birds) that have an action plan under the London Biodiversity Action Plan (LBAP, 2007). They are also included in the Olympic Park Biodiversity Action Plan (Consultation Draft, September 2008).
- 1.2 Black Redstarts were originally a montane species, but have adapted to nesting on buildings and building sites (Downie and Robinson, 2008). Black redstarts have previously been recorded in the area and the Olympic Park has been flagged as a potential site for breeding black redstarts during the development stages.
- 1.3 It was therefore deemed necessary to survey the Olympic Park during the black redstart breeding season, to ensure that any nesting birds were discovered and could be suitably protected by issuing a 50 metre buffer zone to avoid disturbance during construction.
- 1.4 The creation of the Olympic Park has caused a landscape change for a large area of land. Some of this land contained pockets of habitat that supported many bird species. As a result of the development, many birds that traditionally bred in this area will lose their nesting and foraging sites. However, the creation of new habitats as part of the development of the Olympic Park has the potential to mitigate against such loss and provide new foraging and nesting areas for birds. During the black redstart surveys all birds were recorded, ensuring that any birds using the site can be considered in the site design process.

2. Methodology

- 2.1 The survey guidelines for black redstarts (Gilbert *et al*, 1998) state that a visit should be carried out fortnightly from the beginning of April until the middle of July, starting up to an hour before dawn, in suitable weather conditions. This methodology was adhered to for all the Olympic Park black redstart surveys in 2007 and 2008.
- 2.2 The Olympic Park site was split into a north and a south site throughout the duration of the black redstart surveys and these two areas were surveyed separately, both receiving nine visits every two weeks between early April and late July in 2007 and 2008.
- 2.3 All zones within the sites were visited during the surveys and any birds seen or heard were recorded, together with numbers and activities. Recording the activity can help determine if a bird is breeding on site, for example a singing bird is likely to be holding a territory and repeated sightings on consecutive visits would strongly suggest a nesting attempt. Table 2.1 demonstrates some activities and their relation to the breeding behaviour.

Table 2.1 - The activities of the birds and their relation to the likelihood of whether a bird is breeding on site

Activity	Breeding Code
Feeding	Non breeding
On site in suitable habitat but not showing any of below activities	Possibly breeding
Singing	Probably breeding

Pair	Probably breeding
Territorial aggressive interaction	Definitely breeding
Agitated behaviour	Definitely breeding
Bird carrying nesting material	Definitely breeding
Bird carrying food	Definitely breeding
Nest	Definitely breeding
Recently fledged birds	Definitely breeding
Juvenile birds	Non breeding

3. Results

- 3.1 There were no records of black redstart throughout the surveys for 2007 and 2008. Due to the early starts, regular visits and thorough coverage of the park, it is highly unlikely that any black redstarts went undiscovered on the site during the summers of 2007 and 2008.
- 3.2 A total of 55 bird species were recorded during the 2007 and 2008 bird surveys. Of these, 30 species demonstrated behaviours that suggested they were likely to be breeding or attempting to breed on site. A further 15 species may well have attempted to breed on site due to the presence of suitable habitats, but no indicative behaviour was recorded. A list of the bird species recorded and their breeding statuses is listed in Appendix 1.
- 3.3 Some of the species recorded are of Birds of Conservation Concern or have national Species Action Plans. The Olympic Park Biodiversity Action Plan (BAP) list includes 10 bird species, 8 of which were recorded during the bird surveys. All notable species that were recorded during the surveys are listed in table 3.1.

Table 3.1 - Specially protected species and species of conservation concern recorded during the 2007 and 2008 bird surveys.

Species	UK BAP	London BAP	Olympic Park BAP	Conservation Status
Bullfinch	Priority Species			Red List (BDp)
Grey Heron		Priority Species	Priority Species	
Herring Gull	Priority Species			Amber List (BDMp)
Linnet	Priority Species		Priority Species	Red List (BDp)
Song Thrush	Priority Species		Priority Species	Red List (BDp)
Sand Martin		Priority Species	Priority Species	Amber List (SPEC 2 or 3)
Dunnock	Priority Species			Amber List (BDMp)
House Sparrow	Priority Species	Priority Species	Priority Species	Red List (BDp)
Starling	Priority Species		Priority Species	Red List (BDp)
Cuckoo	Priority Species			Amber List (BDMp)
Kingfisher			Priority Species	Amber List (SPEC 2 or 3)

Swift			Priority Species	
Black-headed gull				Amber List (BDMp0)
Common Gull				Amber List (BDMp)
Lesser black-backed gull				Amber List (BL, BI)
Mute swan				Amber List (BI)
Cormorant				Amber List (BL)
Kestrel				Amber List (BDMp)
Peregrine falcon				Amber List (SPEC 2 or 3)
Swallow				Amber List (SPEC 2 or 3)
House martin				Amber List (BDMp)
Willow warbler				Amber List (BDMp)
Teal				Amber List (WI)

BDp = Rapid (> 50%) decline in UK breeding population over last 25 years

BDMp = Moderate (25-49%) decline in UK breeding population over last 25 years

BI = > 20% of European breeding population in UK

BL = > 50% of UK breeding in 10 or fewer sites, but not rare breeders (BR)

WI = > 20% of NW European (wildfowl), East Atlantic Flyway (waders) or European (others) non-breeding populations in UK

SPEC 2 or 3 = Species with unfavourable conservation status in Europe (SPEC = Species of European Conservation Concern)

3.4 An additional species that was recorded outside of the black redstart surveys was the grey wagtail. A pair was seen foraging several times in the Channelsea Gorge during a kingfisher survey in August 2008 and may well have been provisioning for young. A pair was also noted in the vicinity of Carpenters Lock repeatedly during October 2008. Grey wagtails are on the Amber List of Birds of Conservation Concern due to moderate declines of 25-49% of the UK breeding population in the last 25 years. This species was, however, excluded from the Olympic Park BAP species list at the framework stage, as it was decided that they were unlikely to use the site (ODA, 2008).

Breeding birds on site

3.5 Of the 23 species listed in table 3.1, 10 demonstrated behaviour suggesting that they bred or attempted to breed, namely linnet, song thrush, sand martin, dunnoek, house sparrow, starling, kingfisher, lesser black-backed gull, mute swan and willow warbler. A further five species may well have attempted to breed on site, but this was not recorded, namely bullfinch, herring gull, swift, swallow and house martin.

3.6 Grey wagtails were also recorded on site outside of the black redstart surveys. They were seen foraging in a pair and regularly flying off together and may well have attempted to breed on site.

3.7 Much of the Olympic Park site is currently being developed, leaving very few areas of habitat unaffected. The remaining areas of habitat surveyed in 2008 included Channelsea Gorge, the Greenway and the Stratford City Land balancing pond (under bridge H08). The balancing pond provided a good reed habitat, supporting singing reed and sedge warblers and the Channelsea Gorge and Greenway supported a wide range of birds. During bird surveys in early spring 2008, it was noted that that nearly every remaining area of vegetation was occupied by singing birds. The Olympic Park area was surveyed for breeding birds prior to development, between 2002 and 2006. These surveys indicated that the area supported many species of breeding birds, including

several UK BAP and Red List species. The black redstart surveys conducted in 2007 and 2008 confirm that a wide variety of bird species still breed within the remaining suitable habitats within the Olympic Park. These findings allow these species to be incorporated into the mitigation process, ensuring that suitable habitats are provided in the future.

4. Discussion

- 4.1 Black redstarts were not recorded during the Olympic Park bird surveys, however several other notable species were and these species are listed in Table 3.1.
- 4.2 The Olympic Park BAP includes 10 bird species, of which 8 were recorded on site during the bird surveys. Black redstart and reed bunting were not recorded during the surveys, but both could potentially breed on site if the correct habitat requirements are provided.
- 4.3 Action Plans have been created for the 10 Olympic Park BAP species. These Species Action Plans outline habitat types and features that may fulfil the foraging or nesting requirements of these species. Six of the species, namely black redstart, house sparrow, starling, swift, king fisher and sand martin also have the provision of nesting holes or nest boxes as part of their Action Plans.

5. Conclusions and Recommendations

Black redstart

- 5.1 Although the Olympic Park was considered potentially suitable for black redstarts, thorough surveying of the area during the breeding seasons of 2007 and 2008 suggests that no black redstarts were present.
- 5.2 Although no black redstarts have been recorded so far during the construction process, black redstarts have previously been recorded in the area and could attempt to breed on site in the future. The black redstart is a London BAP and Olympic Park BAP species and therefore it is important to try and provide for its nesting requirements as part of the Olympic Park mitigation process. The Olympic Park BAP has recommended the provision of nest boxes and brownfield habitat within the Olympic Park. This should provide nesting and foraging sites for this important species.
- 5.3 Construction works will continue until 2012 and during this time the Olympic Park could still potentially support breeding black redstarts. Therefore it is recommended that the black redstart breeding surveys are repeated in future years, whilst the Olympic Park is still under construction.

Other bird species

- 5.4 The bird surveys have also confirmed the presence of a variety of species on the Olympic Park site. Some of these are already considered within the Olympic Park BAP. It is important to recognise that the absence of a species during 2007–08 does not mean that it no longer needs to be taken into account in the Olympic Park design and Biodiversity Action Plan. These must also continue to take account of species that were recorded prior to site clearance and species that could colonise the redeveloped site in the future.
- 5.5 The Olympic Park BAP includes 10 bird species. These birds have Species Action Plans which aim to provide suitable foraging and nesting conditions within the Olympic Park. The provision of habitats and nesting boxes for the target Olympic Park BAP species should also help other

notable species. For example dunnocks, which are a UK BAP and Amber List species, would benefit from the scrub and hedges required as part of the song thrush Species Action Plan.

- 5.6 The Olympic Park BAP also has Habitat Action Plans which aim to provide habitats such as brownfield sites, grassland, scrub and reed beds. The provision of these habitats will tie in with the Species Action Plans, providing habitats required by the target bird Olympic park BAP species.
- 5.7 Grey wagtails were recorded foraging in Channelsea Gorge and Carpenter's Lock. This species was originally intended to be an Olympic Park BAP species, but was not included as it was thought unlikely that they would breed on site (ODA 2008). Since this species has been recorded on site during the 2008 surveys and is on the Amber List of Birds of Conservation Concern, it is recommended that this species is incorporated into the mitigation proposals. The simple erection of grey wagtail nesting boxes under appropriately located bridges would aid this species with its breeding attempts.
- 5.8 Swifts are an Olympic Park BAP species and some swift nest boxes have already been erected within the Olympic Park; these were successfully used in 2008. House martins and swallows were also recorded on site and although these birds are not on the Olympic Park BAP, they are on the Amber List of Birds of Conservation Concern due to large declines in recent years. It is easy and relatively cheap to erect artificial nests to encourage swallows and house martins to nest and this would benefit these declining species. It is recommended that artificial nests are provided under building eaves as part of the mitigation process.
- 5.9 Channelsea Gorge may be lost as part of the Olympic Park design. This area is an important foraging site for kingfishers and has previously provided a nesting site for them (LUC, 2007). Kingfishers are an Olympic Park BAP species. Grey herons, another Olympic Park BAP species, have also been noted at the site and the shallow channel may also provide this species with fishing habitat. If possible, Channelsea Gorge should be kept as it provides habitat for many birds, including two of the Olympic Park BAP species. If retention of this area is not possible, then increased consideration of these species in the design of new wetland / waterway habitat and through the provision of new nesting opportunities for kingfishers is necessary.
- 5.10 Some of the mitigation suggestions outlined within the Olympic Park BAP will benefit a whole range of birds and other species, not just the target bird species. Some species, such as grey wagtails and swallows require specific nesting conditions and the mitigation options proposed above would benefit these species. The Olympic Park site originally supported a good number and range of birds, and careful consideration when planning the creation of future habitats would ensure that the completed site also supports a large number and range of birds, making it a biodiversity friendly and attractive site to visit.

6. References

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Appendix 1: List of birds recorded during the surveys and their breeding status on site

Species	Breeding Status
Blackbird	Demonstrated signs of breeding
Blackcap	Demonstrated signs of breeding
Black-headed Gull	Possibly bred, no signs seen
Blue Tit	Demonstrated signs of breeding
Bullfinch	Demonstrated signs of breeding
Canada Goose	Not likely to have bred on site
Carrion Crow	Possibly bred, no signs seen
Chaffinch	Demonstrated signs of breeding
Chiffchaff	Demonstrated signs of breeding
Collared Dove	Possibly bred, no signs seen
Common Gull	Not likely to have bred on site
Common Tern	Not likely to have bred on site
Coot	Demonstrated signs of breeding
Cormorant	Not likely to have bred on site
Crow	Possibly bred, no signs seen
Cuckoo	Not likely to have bred on site
Duncock	Demonstrated signs of breeding
Feral Pigeon	Demonstrated signs of breeding
Garden Warbler	Possibly bred, no signs seen
Goldfinch	Demonstrated signs of breeding
Great Black-Backed Gull	Not likely to have bred on site
Great Spotted Woodpecker	Demonstrated signs of breeding
Great Tit	Demonstrated signs of breeding
Greenfinch	Demonstrated signs of breeding
Grey Heron	Not likely to have bred on site
Grey Wagtail	Possibly bred, no signs seen
Herring Gull	Possibly bred, no signs seen
House Martin	Possibly bred, no signs seen
House Sparrow	Demonstrated signs of breeding
Jay	Demonstrated signs of breeding
Kestrel	Not likely to have bred on site
Kingfisher	Demonstrated signs of breeding
Lesser Black-Backed Gull	Demonstrated signs of breeding
Linnet	Demonstrated signs of breeding
Long-Tailed Tit	Demonstrated signs of breeding
Magpie	Demonstrated signs of breeding
Mallard	Demonstrated signs of breeding
Mistle Thrush	Possibly bred, no signs seen
Moorhen	Demonstrated signs of breeding
Mute Swan	Demonstrated signs of breeding
Peregrine Falcon	Held territory but did not breed
Pied Wagtail	Demonstrated signs of breeding
Reed Warbler	Possibly bred, no signs seen
Robin	Demonstrated signs of breeding
Sand Martin	Demonstrated signs of breeding
Sedge Warbler	Possibly bred, no signs seen

Song Thrush	Demonstrated signs of breeding
Starling	Possibly bred, no signs seen
Swallow	Possibly bred, no signs seen
Swift	Possibly bred, no signs seen
Teal	Not likely to have bred on site
Common Whitethroat	Demonstrated signs of breeding
Willow Warbler	Possibly bred, no signs seen
Wood Pigeon	Demonstrated signs of breeding
Wren	Demonstrated signs of breeding